



## State of Utah

### Department of Natural Resources

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas & Mining

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

April 4, 2007

John Spencer  
Simplot Phosphates  
9401 North Highway 191  
Vernal, Utah 84078-7802

Subject: Surety Estimate, Simplot Phosphates, Vernal Phosphate Mine, M0470007, Tasks 134, 1313, and 1402, Uintah County, Utah

Dear Mr. Spencer:

The Division has reviewed the surety amount for the Vernal Phosphate Mine, and the new surety amount, escalated to 2009 dollars, is \$4,893,000.00. This includes the final release of 159.2 acres as proposed in October 2004 and May 2006.

The Division realizes this is a substantial increase from your current surety amount of \$2,336,000.00, but please keep in mind that the surety was last examined in 2001 and that it was only escalated to 2004 dollars.

Enclosed are copies of the spreadsheets used in calculation of the surety. If you desire to schedule a meeting to discuss these figures, please contact Paul Baker at 801-538-5261.

Questions about submitting the surety should be directed to Beth Ericksen at 801-538-5318. Please furnish the surety by May 7, 2007. You will also need to submit a revised reclamation contract, and you should contact Ms. Ericksen for information in this regard.

The Division sincerely appreciates the cooperation you have shown during the surety revision process.

Sincerely,

Susan M. White  
Mining Program Coordinator  
Minerals Regulatory Program

SMW:PBB:pb

Enclosure: Bond calculation spreadsheets

cc: Stan Perkes, State BLM Office  
Mary Ann Wright DOGM  
Beth Ericksen DOGM

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**RECLAMATION SURETY ESTIMATE**

S.F. Phosphates Ltd. Company M/047/007  
 Vernal Phosphate Operations Uintah County, Utah  
 Prepared by Utah Division of Oil, Gas & Mining (AAG)

filename m47-7may01.wb3

Last Update 37019

page "estimate" PAGE NUMBER:

**Estimate Details**

- This estimate is based on information from the SF Estimate of April 2001
- Information supporting unit costs is on a separate spreadsheet page.
- The estimate for demolition of facilities is on a separate spreadsheet page.

**MINING PANEL DISTURBANCE**

	472 acres	days; acres	\$/HR; \$/acre	\$
project manager		236.0	68.75	129,800
contouring D9N, 100 ft, 1.5 ft depth	2 acre/day	236.0	331.30	625,494
topsoil spreading 637E P-P, 6 inch depth	3.9 acre/day	121.0	481.28	465,978
seeding & fertilizing - DH4	29.4 acre/day	16.1	134.40	17,262
seed mix - drill seed	acre>	472	113.69	53,662
fertilizer	acre>	472	38.00	17,936
Total				1,310,132
	\$2,776 per acre			

**PARTIALLY RECLAIMED MINING DISTURBANCE**

- This "partially reclaimed" section is for mine disturbances which have been regraded & topsoil replaced, but not yet seeded.

	283.99 acres	days; acres	\$/HR; \$/acre	\$
project manager		9.7	68.75	5,313
contouring D9N, 100 ft, 1.5 ft depth	2 acre/day	142.0	331.30	376,344
topsoil spreading 637E P-P, 6 inch depth	3.9 acre/day	72.8	481.28	280,367
seeding & fertilizing - DH4	29.4 acre/day	9.7	134.40	10,386
seed mix - drill seed	acre>	284	113.69	32,287
fertilizer	acre>	284	38.00	10,792
Total				715,487
	\$2,519 per acre			

**LANDFILL - VERIFY TASKS**

- Ultimate closure of this Class IIIb landfill must satisfy Div. of Solid & Hazardous Waste.
- Final closure requires a 2-foot cover of borrow material graded to match the surrounding topography.

	7.5 acres	days; acres	\$/HR; \$/acre	\$
project manager		3.8	68.75	2,063
contouring D9N, 100 ft, 1.5 ft depth	2 acre/day	3.8	331.30	9,939
topsoil spreading 637E P-P, 1 ft depth	1.9 acre/day	3.9	481.28	15,198
seeding & fertilizing - DH4	29.4 acre/day	0.3	134.40	274
seed mix - drill seed	acre>	8	113.69	853
fertilizer	acre>	8	38.00	285
Total				28,612
	\$3,815 per acre			

**FUTURE MINING**

Projected disturbance for 3 years of future mining (through 2009) as shown on maps submitted by the operator.

	156.1 acres	days; acres	\$/HR; \$/acre	\$
project manager		78.1	68.75	42,928
contouring D9N, 100 ft, 1.5 ft depth	2 acre/day	78.1	331.30	206,864
topsoil spreading 637E P-P, 6 inch depth	3.9 acre/day	40.0	481.28	154,108
seeding & fertilizing - DH4	29.4 acre/day	5.3	134.40	5,709
seed mix - drill seed	acre>	156	113.69	17,747
fertilizer	acre>	156	38.00	5,932
Total				433,287
	\$2,776 per acre			

**SAG MILL & SHOP**

-SAG Mill (15 acres) & Mine Shop (6.2 acres)

	21.2 acres	days; acres	\$/HR; \$/acre	\$
project manager		5.4	68.75	2,990
ripping - D9N, 0.4 mph	3.15 acre/day	6.7	331.30	17,840
topsoil spreading 637E P-P, 6 inch depth	3.9 acre/day	5.4	481.28	20,930
seeding & fertilizing - DH4	29.4 acre/day	0.7	134.40	775
seed mix - drill seed	acre>	21	113.69	2,410



fertilizer	acre>	21	38.00	806
Total				45,750
	\$2,158	per acre		

#### MAIN OFFICE & MILL - PLANT FACILITIES AREA

-Earthwork & revegetation tasks for the Main Office & Mill area after structure demolition.  
 -Demolition of facilities is described on a separate spreadsheet page.  
 -Original 1984 reclamation estimate did not include topsoil tasks at these facilities.

	24 acres	days; acres	\$/HR; \$/acre	\$
project manager		7.6	68.75	4,191
ripping - D9N, 0.4 mph	3.15 acre/day	7.6	331.30	20,196
topsoil spreading 637E P-P, 6 inch depth	3.9 acre/day	0.0	481.28	0
seeding & fertilizing - DH4	29.4 acre/day	0.8	134.40	878
seed mix - drill seed	acre>	24	113.69	2,729
fertilizer	acre>	24	38.00	912
Total				28,905
	\$1,204	per acre		

#### UNPAVED ROADS

-These roads are identified on the map labelled Figure 4 in the April 2001 submission.  
 -Original 1984 reclamation estimate did not include topsoil tasks for roads.

	42 acres	days; acres	\$/HR; \$/acre	\$
project manager		21.0	68.75	11,550
contouring D9N, 100 ft, 1.5 ft depth	2 acre/day	21.0	331.30	55,658
topsoil spreading 637E P-P, 6 inch depth	3.9 0	0.0	481.28	0
seeding & fertilizing - DH4	29.4 acre/day	1.4	134.40	1,536
seed mix - drill seed	acre>	42	113.69	4,775
fertilizer	acre>	42	38.00	1,596
Total				75,115
	\$1,788	per acre		

#### PAVED ROADS

-These roads are identified on the map labelled Figure 4 in the April 2001 submission.  
 -Original 1984 reclamation estimate did not include topsoil tasks for roads.

	13.1 acres	days; acres	\$/HR; \$/acre	\$
project manager		4.2	68.75	2,288
contouring D9N, 100 ft, 1.5 ft depth	2 acre/day	6.6	331.30	17,360
ripping - D9N, 0.4 mph	3.15 acre/day	4.2	331.30	11,024
topsoil spreading 637E P-P, 6 inch depth	3.9 acre/day	0.0	481.28	0
seeding & fertilizing - DH4	29.4 acre/day	0.4	134.40	479
seed mix - drill seed	acre>	13	113.69	1,489
fertilizer	acre>	13	38.00	498
Total				33,138
	\$2,530	per acre		

#### TAILINGS POND - MISCELLANEOUS AREAS

-Miscellaneous areas associated with the tailings as described in Figure 6 in the April 2001 submission.

	60.9 acres	days; acres	\$/HR; \$/acre	\$
project manager		19.3	48.25	7,464
ripping - D9N, 0.4 mph	3.15 acre/day	19.3	331.30	51,247
topsoil spreading 637E P-P, 6 inch depth	3.9 acre/day	15.6	481.28	60,123
seeding & fertilizing - DH4	29.4 acre/day	2.1	134.40	2,227
seed mix - drill seed	acre>	61	113.69	6,924
fertilizer	acre>	61	38.00	2,314
Total				130,299
	\$2,140	per acre		

#### TAILINGS POND - IMPOUNDED MATERIAL

This acreage represents the maximum tailings area within 5 years, i.e. by 2012.

	410 acres	days; acres	\$/HR; \$/acre	\$
project manager		13.9	48.25	5,383
aerial seed application	15 \$/acre	410.0	15.00	6,150
initial seed mix - nurse crop	10.53 \$/acre	410.0	10.53	4,317
initial fertilizer	38 \$/acre	0.0	0.00	15,580

regrading D8N - 10(100'dia x10') -DOGM	9,691 cy	0.0	0.68	6,590
discing nurse crop - DH4	29.4 acre/day	13.9	104.65	11,675
applying seed & fertilizer - DH4	29.4 acre/day	13.9	134.40	14,994
mulch application - DH4 w/attachment	34.9 acre/day	11.7	107.17	10,072
discing mulch in - DH4	29.4 acre/day	13.9	134.40	14,994
seed mix - drill seed	acre>	410	113.69	46,613
fertilizer	acre>	410	38.00	15,580
mulch @ 1 ton/acre - alfalfa	acre>	410	100.00	41,000
Total				192,949
	\$471 per acre			

#### PIPELINE

-Maximum area re-disturbed due to decommissioning or repair of the pipeline at final reclamation.

	2.5 acres	days; acres	\$/HR; \$/acre	\$
project manager		1.3	48.25	483
contouring D9N, 100 ft, 1.5 ft depth	2 acre/day	1.3	331.30	3,313
seeding & fertilizing - DH4	10 acre/day	0.3	134.40	269
seedmix - drill seed	acre>	2.5	113.69	284
fertilizer	acre>	2.5	38.00	95
Total				4,444
	\$1,777 per acre			

<b>BONDING SUMMARY</b>		<b>ACRE</b>	<b>\$</b>	<b>\$/acre</b>
Panel B		472.0	1,310,132	2,776
Panel C		284.0	715,487	2,519
Landfill		7.5	28,612	3,815
Future Mining		156.1	433,287	2,776
SAG Mill & Shop		21.2	45,750	2,158
Plant Facilities		24.0	28,905	1,204
Unpaved Roads		42.0	75,115	1,788
Paved Roads		13.1	33,138	2,530
Tailings Pond - Miscellaneous Areas		60.9	130,299	2,140
Tailings Pond - Impounded Material		410.0	192,949	471
Pipeline		2.5	4,444	1,777
Demolition			1,040,974	
	SUBTOTAL		4,039,092	
Mobilization - 7 pieces of equip			7,000	
	SUBTOTAL		4,046,092	
ADD 10% Contingency			404,609	
	SUBTOTAL		4,450,702	
ADD site monitoring - 3 years			15,000	
	SUBTOTAL		4,465,702	
ESCALATION FOR 3 YEARS @ 3.2%/YR			442,572	
TOTAL IN 2009-\$			\$4,893,274	
ROUNDED TOTAL IN 2009-\$			<u>\$4,893,000</u>	
TOTAL AREA BONDED = 1,493.3 ACRES				
AVG. COST/ACRE = \$3,277				



## RECLAMATION SURETY ESTIMATE

S.F. Phosphates Ltd. Company

Vernal Phosphate Operations

Prepared by Utah Division of Oil, Gas &amp; Mining (AAG)

M/047/007

Uintah County, Utah

filename m47-7may01.wb3

Last Update 37019

page "unit\_costs" PAGE NUMBER:

**MASTER LISTING - UNIT COSTS**

-Changes to unit costs on this page will ripple through the estimate spreadsheet.

<u>task description</u>	<u>\$/hr</u>	<u>CY/acre</u>	<u>CY/hr</u>	<u>\$/acre</u>	<u>hr/acre</u>	<u>acre/day</u>	<u>\$/day</u>
project manager <i>Means Heavy Construction Cost Data 2007, 013113, project manager, minimum \$2750/wk =&gt; \$550/day</i>	68.75	NA	NA	NA	NA	NA	550.00
laborer <i>Means Heavy Construction Cost Data 2007, Crew B-6, including O &amp; P</i>	44.75	NA	NA	NA	NA	NA	358.00
contouring - D9R dozer, 100 ft push, 1.5 ft avg. depth <i>DOGM calculations using Rental Rate Blue Book Second Half 2006 for Cat D9R &amp; Means 2007 Crew B-10B</i>	331.30	2,420.0	630.3	1272.01	3.84	2.08	2,650.40
topsoil spreading - 637E P-P scraper, 1/4 mi. one-way, 6 in depth <i>DOGM calculations using Rental Rate Blue Book Second Half 2006 for Cat 637E P-P &amp; Means 2007 Crew B-10B</i>	481.28	806.7	396.5	979.15	2.03	3.93	3,850.24
application of seed & fertilizer - D5G XL Series III dozer (1996) <i>Rental Rate Blue Book Second Half 2006 for Cat D5G XL at 4.0 mph plus trailer towed diesel mulcher &amp; Means 2007 Crew B-10B</i>	134.4	0.0	0	36.57	0.26	29.40	1,075.20
seed mix - nurse crop <i>Stevenson International Seed quote of 2-28-07 for SF @ rate of 5.0 lb/acre</i>	0	0.0	0	10.53	NA	NA	0.00
seed mix - drill seed rate <i>Stevenson International Seed quote of 2-27-07 for SF @ rate of 13.75 lb/acre</i>	0	0.0	0	113.69	NA	NA	0.00
seed mix - broadcast seed rate (1.5 x drill seed rate) <i>Stevenson International Seed quote of 2-27-07 for SF @ rate of 20.63 lb/acre</i>	0	0.0	0	170.54	NA	NA	0.00
fertilizer <i>Intermountain Farmers Association quote 3-16-00 in SF submission of March 2000 averaging to \$38.47/acre</i>	0	0.0	0	38.47	NA	NA	0.00
ripping - D9R dozer, 0.4 mph, multi-shank, 3 adj. parallel <i>DOGM calc., Rental Rate Blue Book Second Half 2006 for Cat D9R, multi-shank rippers, 3 adj. parallel &amp; Means 2007 Crew B-10B</i>	257.00	0.0	0	652.78	2.54	3.15	2,056.00
discing - D5G XL dozer <i>Rental Rate Blue Book Second Half 2006 for Cat D5G XL at 4.0 mph plus trailer towed diesel mulcher &amp; Means 2007 Crew B-10B</i>	134.4	0.0	0	36.57	0.26	29.40	1,075.20
mulching - D5G XL dozer <i>Rental Rate Blue Book Second Half 2006 for Cat D5G XL @ 5.0 mph plus trailer towed diesel mulcher &amp; Means 2007 Crew B-10B</i>	134.4	0.0	0	30.81	0.18	34.90	1,075.20
D8N dozer - regrading <i>DOGM calc using Rental Rate Blue Book Second Half 2006, 150 ft push, 1 ft depth, Means 2007 Crew B-10B (see attached calc. sheet)</i>	249.88	NA	NA	NA	NA	NA	1,999.04



**Adjusted Total Demolition Costs      \$1,040,974**



# RECLAMATION COST BASIS

## REVEGETATION TASKS

Parameters Used in Calculations for File No.

DOZER DH4 XL SERIES III

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last revision

37018

## DETAILS/ASSUMPTIONS

CAT Edition 31 handbook lacks info for DH4 model, all specifications here are for D4C Series III Dozer

-Cat D4C XL Series III: 80 hp, 16,573 lbs; Cat DH4 LGP Series III (1996) 81 hp.

-Cat dozer 4P: straight blade width 13 ft 1 inch, angled blade 14 ft 6 inch,

-Cat dozer D4C XL: drawbar pull versus ground speed: 4.0 mph at 6.8 lbs, 2.0 mph at 13.5 lbs.

-ASSUME width of pass for disk is straight blade width plus 1.5 feet on each side, i.e. total width of 16 feet

-ASSUME width of pass for drill seeder and disk width are the same at 12 feet.

-ASSUME an overlap of 1/2 foot between passes, giving an effective pass width of 11.5 feet'

-ASSUME average speed for disking and drill seeding is 4.0 mph, and mulching is 5.0 mph

-ASSUME disk/drill cost is same as trailer mounted mulcher Finn B70, 7 tph, \$10/hr rental, \$3.35/hr operating

-one acre = 43,560 SF; use ~400' x 110' block

-ASSUME every 400' requires 0.30 min to pivot, turn, and raise & lower as needed

-ASSUME work efficiency of 50 minutes/hour => 83%

DH4	DIST	SPEED	ADD	MIN/PASS
Time/Pass =(dist/speed)+add on	400.00	5.00	0.30	1.21
NOTE: SPEED IN MPH		TIME		PASS/HR
#Pass/Hour = time/(MIN/PASS)		50.00		41.35
		FT/PASS		SF/PASS
Sq-ft of effective coverage =(length/pass)*(FT/PASS)		11.50		4600.00
Acreage covered = (SF/PASS)/(SF/acre)			ACRE/PASS	0.11
Acreage covered/Hr =(ACRE/PASS)*(PASS/HR)			ACRE/HR	4.37
Hrs to cover one acre = 1 /(ACRE/HR)			HRS/ACRE	0.23
			<b>34.9 ACRE/8HR-DAY</b>	

FROM RENTAL RATE BLUE BOOK 3Q/00

	EQUIP	OPER
\$/hr, D4H LGP Series III (1996) EROPS(pg 9-4	49.00	15.50
Finn trailer mounted mulcher B70, 7 tph,(pg 17	10.00	3.35
Sub-totals	59.00	18.85
Mult by regional factor (page 9-vii)	0.87	1.00
Sub-totals	51.04	18.85
Sub-total Equipment & Operating Cost		69.89 (\$/HR)

FROM MEANS HEAVY CONSTRUCTION COST DATA 2001

Crew B-10B, 1-Equip Operator (med), hourly cost	42.55 (\$/HR)
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TOTAL COST PER HOUR	112.44 (\$/HR)
TOTAL APPLICATION COST PER ACRE	\$25.75 (\$/ACRE)
current speed used =	5.00 mph
RECLAMATION TREATMENTS D4H	